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# Professionalization of teachers and problematization processes

Profissionalização de professores e processos de problematização

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#### Professionalization of teachers and problematization processes

#### Abstract

The article presents the research aimed at the development of innovative teaching approaches in the context of academic courses for in-service teachers. The problematic focus concerning the identification of strategies to support the renewal of teaching in the direction of greater personalization of interventions. It is assumed that the training processes are particularly related to the acquisition of skills for analyzing and comparing the professional practices, to design and adjust the action, to reflect on their own and others' practices, starting with the recognition of the problems associated with the management the growing heterogeneity of classes. The working hypothesis adopted confirms the value to be paid to reflexivity in professional training processes.

## Keywords

teacher education; professional training; didactic models; situations-problems analysis approach..

#### Profissinalização de professores e processos de problematização

# Resumo

O artigo apresenta a pesquisa voltada para o desenvolvimento de abordagens pedagógicas inovadoras no contexto de cursos acadêmicos para professores em serviço. O foco problemático é a identificação de estratégias para apoiar a renovação do ensino na direção de uma maior personalização das intervenções. Assume-se que os processos de educação estão particularmente relacionados à aquisição de habilidades para analisar e comparar as práticas profissionais, projetar e ajustar a ação, refletir por conta própria e outras práticas, começando pelo reconhecimento dos problemas associados à crescente heterogeneidade das classes escolares. A hipótese de trabalho adotada confirma o valor a ser pago à reflexividade nos processos de treinamento profissional.

# **Palavras-chave**

Formação de professores, formação profissional, modelos didáticos, ensino baseado em problemas.

# 1. Introduction

This article presents the lines and findings of a research study whose aim is the fine-tuning of an innovative, didactic training model within a 1st level professional Master's degree programme<sup>1</sup> in *Didactics and* educational psychology for specific learning disorders introduced by the Department of Philosophy and Education Sciences (formerly the Faculty of Teaching Sciences) at the University of Turin, in collaboration with MIUR (Ministero dell'Università e Ricerca Scientifica - Ministry for Higher Education and Scientific Research) - USR (Ufficio Scolastico Regionale - The Regional Schools Office) of Piedmont (A/Y 2011-12; 2012-13), addressed to teachers of any type and level of schools. It concerns a national-scale project promoted by the Ministry and Universities, in relation to the provisions of Law 170/2010, for the purpose of advancing «university level preparation for any type and level of teaching staff in Specific Learning Disorders  $(SLD)^2$ , via introducing training and refresher courses regarding the subject of learning disability, with particular reference to inclusion at school». Within the framework of the general project coordinates, specified in the relevant Framework Agreement, entered into by MIUR and Universities, within the context of didactic autonomy granted to the latter, the Scientific Committee for the Turin Master's degree programme defines its learning objectives as: critical understanding of the theoretical and conceptual, regulatory, operational and procedural reference frames for identifying students with SLD, for interpreting associated school integration difficulties and for activating appropriate didactic and educational actions; acquisition of competencies in the planning, management and assessment of didactic and learning sequences suitable for promoting success at school of students with learning difficulties, with particular emphasis on students with SLD; development of specific methodological skills in the selection and use of the most advanced methodologies, techniques and tools suitable for advancing learning in students with SLD; the building of competencies in class management according to the principles of action differentiation and personalisation, with specific focus on the needs of students in difficulty and with SLD; acquisition of communicational and relational skills suitable for promoting group-class bonding and the active involvement of all students in school life; development of communicational and relational skills suitable for establishing a relationship of collaboration with the players involved in the management of student cases

<sup>&</sup>lt;sup>1</sup> The first level Italian Master's degree falls within the second cycle defined in the "Bologna Process" legislation (international reform of the Higher Education system of the European Union, which had as its goal the creation of the *European Higher Education Area* –EHEA by the end of 2010). The first level Master's degree corresponds to the 7<sup>th</sup> level of the European Framework – the *European Qualifications Framework* - EQF, which permits comparison of professional qualifications of citizens of European States. In Italy, an interpretation of a university Master's degree finds no similarity within the European system. No national didactic system is provided and the qualification is issued by Italian universities under their independent responsibility, at the end of «scientific specialisation courses and high level permanent and continuous learning».

<sup>&</sup>lt;sup>2</sup> Law no. 170 of 8 October 2010 recognises dyslexia, dysorthography and dyscalculia as specific learning disorders called "SLD," which lead to special didactic needs not attributable to disability.

with SLD. The author, in her capacity as director of the Master's degree programme, assumes responsibility for the didactic planning of the Course, understood as the crossroads between practical and professional knowledge areas of teachers and scientific and subject-specific knowledge areas offered by the formal-type teaching provided by the Master's degree, a potentially strategic learning lever in professionalization management. In relation to restrictions of a general nature (implementing criteria laid down under the national MIUR-Universities framework agreement, transposed by the Piedmont USR - University of Turin agreement), University-related (regarding didactic planning procedures) and available resources (grant made available by MIUR for covering the curriculum teaching costs; co-financing by the University of Turin directed at limiting registration and attendance taxes due from course students; ad hoc financing for creating traineeship activities made available by the Fondazione Cassa di Risparmio di Cuneo bank foundation; agreements with 71 schools across the Piedmont area available as venues for implementing traineeship activities in the field); research study lines have been launched commencing from the problem: how do we respond, via education and vocational training of a university nature – with specific reference to traineeship activities – to the needs of the professional development of teachers in service in relation to action planning and management, contexts and didactic and educational actions such as to promote integration of all students, with specific focus on those with SLD? In this context, which areas of professional action are most critical from the standpoint of teachers in schools and need to be monitored in the planning of university professional training in service? A dual objective has been adopted: the creation and validation, from an exploratory perspective, of a didactic case of an innovative traineeship, understood as a contribution to defining the professional training service of teachers in an academic context; acquisition of knowledge areas regarding the professional training needs of teachers in the field in managing mixed classes marked by inclusion of students with SLD.

#### 2. Theoretical framework

From the standpoint of primary theoretical and methodological assumptions, one of the main tasks of research in the pedagogic and didactic field pivots arounds the processing of knowledge supporting the professionalization of teachers and educators in managing the definition of models, mechanisms and training-based professional practices in line with the complex, fixed and dynamic nature of didactic and educational actions. With specific reference to applied research and to research and development (Van der Maren 2014, 2003; Furlong & Oancea, 2006, 2008), studies directed towards the fine-tuning of innovative methodologies, the building of mechanisms and didactic materials and the definition of best practice represent a working direction asked to take into account the fact that professional training processes are specifically linked to the acquisition of competencies for analysing and comparing practices, planning and regulating the action and reflecting on one's own practices and those of others (Rossi, 2015, p.50). The key

challenge, with which research has to measure itself, is represented by identifying problems, by defining concepts and by processing theoretical and practical cases which are able to intercept the "de facto" didactic and educational processes and, via this route, by the offering tools to operators for "conceiving" and managing their professional engagement with ever greater awareness and critical control (Cardarello 2016; Damiano, 2006). In the debate on identifying models, mechanisms and recommended practices in the training of teachers, one notes confirmation of "paradigms" which, in various ways, have professional growth and personal processing of meanings as their focus, which are able to translate into forms of review and renewal of didactic engagement, characterised as medial action or as the dynamic building of symbolic and communicational and relational conditions directed towards supporting student (self-) learning (Damiano, 2013). Taking this context of a general nature, as a function of defining a didactic case model structuring the traineeship path of the Master's degree programme, exploration was undertaken of academic works directed towards gathering elements answering the question: given the resources and actual restrictions for creating a Master's degree in Didactics and Educational Psychology of Specific Learning Disorders at the University of Turin, in relation to the identified training objectives, what operational criteria need to be adopted in the development of a traineeship path directed towards supporting the professional development of teachers? A number of aspects which need to be monitored come to light: the implications arising out of subscribing to the concept of professionalism/professionalization with reference to teaching, with identification of the pedagogic and didactic skill-set category as an essential educational training criterion; the "indirect" role of scientific and subject-related knowledge areas in the training of teachers, in relation to the dynamics between these and knowledge of a practical and experience-based nature arising out of practising the teaching profession; didactic, practice and problem-based criteriology, with the need for curriculum planning, for didactic mediation methods and consistent teaching methodologies; interpretation of the university traineeship as practical training, based on drawing on the "immersion-decontextualization" dynamic, following a rationale of dialogue between school and university as professional training environments in synergy. These points will be briefly illustrated. Within the debate on the applicability of the concepts of "profession" or "professional development" (enhancement of the study background valuable for practising a profession) to a teacher's job, in the most recent academic papers, the position is commonly adopted attributing to teaching the nature of a professional activity, albeit with particular characteristics (Damiano, 2004). Generally speaking, it is held that teachers may be considered professionals in that their job essentially consists of the creation of non-routine intellectual actions with a view to pursuing objectives in the complex situations in which they operate with a significant degree of autonomy and responsibility, starting with a personal and study background built on multiple "resources" and forms of theoretical and scientific and practical and experience-based forms of knowledge (also involving the ethical and value-related sphere) (Paquay, Altet, Charlier, & Perrenoud, 2006;

Perrenoud, 1999a; Tardif, & Lessard, 2004). One sees confirmation of a case of innovation in the training of teachers – at the start of their career and in service – in the direction of professionalization, commencing from recognition of a "structural transformation" of the conditions in which teaching is practised, linked to socio-cultural changes which have impacted schools over the last decades and twenty years (Perrenoud 1999a). In line with this trend, the case of professionalization of teachers, in general terms, refers to recognition of the concept of expertise as the pedagogic and didactic category that confers value to the autonomy and decision-making responsibility asked of teachers in carrying out their jobs; from this perspective, theoretical knowledge in the education area - "for teaching" - may be resources serving developing professional "action potential", if acquired in a spendable form, in response to teachers' need for professional training, while it essentially excludes the option of a use which is directly applicable, due to the complexity and specific nature of the situations which a teacher has to deal with each time and as a result of the nature itself of theoretical knowledge about education, often developed more according to scientific and subject-based criteria with the focus on inner consistency, rather than as a response to the problems of the players in the field (Perrenoud, 1999a; Altet, 2006; Perrenoud, Altet, Lessard, & Pacquay, 2008). Within the ambit of this position, reference to the "Reflective Practitioner" paradigm (Schön, 1983) provides the foundation for proposing a criterion of didactic transposition of "educating and teaching" knowledge areas as theoretical and conceptual frames helpful to a teacher for carrying out and analysing his/her (own and that of others) didactic and educational practices and the assumptions underpinning them (Altet, 2010). The professional teacher, for carrying out his/her job, would need to be able to tap into an integrated multiplicity of references in a rational way, both of a theoretical and general nature and derived from experience, for the purpose of contextualizing, thanks to a personal effort of interpretation, the issues to be dealt with and the possible strategies for solutions, in a kind of dialogue with the situation which passes via the action - "reflection-in-action" - which entails recognising reviewing and developing one's own theoretical, conceptual and operational methods. Research contributions of anthropological origin, based on analysing the forms of knowledge which teachers activate in doing their job, particularly make the learning potential of theoretical and scientific knowledge areas "for teaching" problematic, which are conditioned by the possibility of linking them to tangible, operational situations and detailed tasks (Tardif, & Lessard, 2004). Generic reference to experience is not being called into question but rather the setting up of training mechanisms which can enhance the job as a real "mediator" in the building of professional knowledge. The practice of professional action would implicate a process of integration-prioritisation of the knowledge areas of which teachers are the carriers, amongst which those of a theoretical-general nature referring to the education area, the subject to be taught and arising out of educational studies and personal culture would occupy a "secondary" role compared to knowledge "of" and "on" the job, directly linked to professional experience; the latter would act as organiser, directing the use of the former as a function of perceived usefulness, rather than based on a logical and cognitive footing. In other words, teachers would tend to overlook the content of their personal study background which, in their view, is needlessly abstract or unrelated to the reality of their job, while keeping the content which they believe may in some way be useful. Theoretical knowledge would participate, when all is said and done, to contributing to the professionalization of teachers, if and to the extent in which it succeeds in responding to the needs of rationalising-justifying the action perceived by the players, starting with the knowledge they have developed in relation to their professional experience (Tardif, & Gauthier, 2006). Other indications in favour of professional training, experience-based approaches which provide for enhancing the formalgeneral nature of educational knowledge areas, supporting a reflective practice of the profession as a crucial passage in the acquisition of "power of action in context", can be recognised in the theory of adult learning from a "transformative" perspective, in the theoretical reasoning supporting competency-based approaches in professional training and in the research branch attributed to professional didactics of French-speaking origin. Amongst the methodological and operational implications of the transformative learning theory, to be taken into consideration in training programmes, a criterion recommended in the offering of new content/knowledge areas from a promotional perspective compared to the development of learning dynamics that may render people capable of changing for the purpose of responding pro-actively to experience-based conditions, which are relatively problematic, concerns the active building of relations between new cognitive factors and previous knowledge areas, so as to promote the evolution of personal, interpretative frameworks (Mezirof, 2003). Elements, which are essentially aligned, with implications also for factors concerning curriculum planning in the development of training sequences, originate from the generation of professional training, competency-based theories. In this case, also starting from recovering experience-based learning theories, we can trace "spiral-shaped" development paths, starting commencing from lived experience (action, creation of an activity, etc.), followed by a first phase of performancereflective practice, directed towards rebuilding events, reinterpreting them and transforming then via the narration for the purpose of rendering them intelligible; followed by conceptualization and modelisation, via decontextualization, which aims at identifying more general and stable strategies and models, to be reinvested at a later stage, on returning to practice, in other more or less similar contexts (Le Boterf, 2000). Professional Didactics has thematised the issue of the relation between practical and theoretical knowledge areas, in terms of division between "cognitive models" and "operational models" (Pastré, 2007). According to this research branch, professional learning would primarily consist of the acquisition of pragmatic concepts or action organisers - «operational models»-, learned directly in context and referring to a class of professional situations, within the ambit of a practice community. These are concepts identifying the conditions for an action held to be effective by the players, which are representative of a professional field and the strategies which an individual should be able to mobilise for acting in an effective manner.

Alongside concepts which reference a pragmatic model, other conceptualisation methods or «cognitive models» come into play which concern the characteristics of the action "beyond" the transformative tension immediately experimented while the action is in progress. In professional learning, the operational models learned in practice refer to cognitive models which may be explicit and formalised, when they are based on scientific knowledge areas or, more often, they are largely implicit and informal, as may occur in the case of professional activities with a high rate of complexity, such as teaching. It is important to consider the type of division which may be established in learning between cognitive and operational models. Three possible dynamics have been identified. In the first, the cognitive models are externally and previously learned via practice; within the practice context, the player builds his/her own operational models which may refer to cognitive models but primarily derive from the direct practice of the activity which represents the main validation source; in these situations, there is a high risk of a rift developing between theory and practice, with progressive alienation of the first as a source of significance underpinning the action. In other cases, when a profession in learned in the field without any theoretical preparation, cognitive models and operational models are learned at the same time, to the extent that it is difficult to distinguish them; cognitive models are of an empirical nature, a fact sufficient for supporting operational models but not for justifying them; it is the situations in which professional learning takes place immersively, in comparison to the complexity of experience, which creates exposure to uncertainty and, at times, leads to confusion with regard to the meaning underpinning choices that are made and to difficulty in recognising and justifying the action criteria outside of the particular situation. A course of professional learning, such as to allow a certain autonomy and efficacy at an operational level, in addition to detailed reference to specific situations requires cognitive and operational models to be clearly separate and recognisable, while, at the same time, succeeding in creating a reciprocal dialogue, a dynamic which allows both to evolve and allows practice to evolve. It is desirable that the cognitive models, for the purpose of representing a useful basis for the building of operational models, are attributable to clearly identifiable knowledge areas validated "through testing in the field", in practice and by practices and which are offered in relation to problem situations, i.e. ill-defined problems which need to be framed, defined and handled in a partially innovative manner. In the field of theories concerning possible training didactic models, at least in relation to the reference context (Damiano, 2014a; 2014b), we find evidence of "practice didactics", based on the alternation of direct experience – according to standard strategies, such as, for example, observation and imitation of model actions and co-operation, followed by recording them, as encoding of observation and rendering imitation explicit, compliments to the execution and occasions for carrying out the actions, valuable for promoting abstraction, i.e. for identifying the core of the didactic action experimented in context, for the purpose of examining it from a decontextualized and generalising perspective, also thanks to comparison with formal teaching knowledge areas, via forms of representation and analysis of the aspects of which form them; this, as a function of a more complete conceptualisation by the teacher undergoing professional, action-based training and possibly formalisation in modellising terms and appropriation/building of teaching theories which are capable of directing operational choices which are intentionally well-founded. With reference to an essentially dual-track, training structure which provides for two interconnected and synergic learning environments, one dedicated to immersion in "de facto" didactic practices – school contexts – and one to rendering decontextualization explicit - trainee workshops at the academic location - from the standpoint of the tasks assigned to instructors and the dual function they are asked to perform: mentor and tutor. A first type of task concerns "performing", "being observed" and "being imitated" in context, to which a practice reconstruction process corresponds (more or less shared) by the trainee; a further category of actions is directed towards supporting and complementing the commitment of the teacher undergoing training in "breaking down", "examining" and "attempting to make clear" the models and theories forming part of the observed actions (and experimented in some form), in the light of the knowledge areas possessed - including thereunder the savoirs savants (Chevallard, 1991), subject of formal learning - for the purpose of verifying the foundations and resilience of the teaching practices being analysed, for the purpose of confirmation and any development and/or relaunching. Whether this means functions - that of mentor in context and tutor at the trainee workshop – are taken on by the same person or not, a condition which cannot always be achieved – we are confronted with differentiation which demands continuity and educational consistency within the ambit of a uniform training process.

### 3. The educational device

The planning restrictions provide for division of the 60 academic credits (in Italian CFU - university academic credits<sup>3</sup>) attributed to the Master's degree (following an overall modular system: 3 modules, each worth 20 CFUs, at «foundation», «intermediate» and «advanced» level), 41 CFUs to be allocated to subject-related teaching, to be delivered for the most part via lectures and/or large group activities (1 CFU= 25 work hours per student, of which 6 hours of lectures and 19 hours of individual study) and in 14 CFUs (350 hours) for the professional training placement (1 CFU= 25 course student work hours, of which 10 hours of observation activity and practice analysis and 15 hours of personal re-elaboration) to be carried out via «direct experience with the aim of applying the theoretical notions learned, carried out in-school with the supervision of a tutor, also at the location and during the working hours the teacher is in service and/or during the placement with a tutor at specialised centres or selected schools». A traineeship pathway unfolds

<sup>&</sup>lt;sup>3</sup> Introduced with the 1999 universities' reform (Ministerial Decree 509/99), the CFU or academic credit points system is a method used by Italian universities for measuring the workload required of a student.

which is essentially addressed towards promoting the fine-tuning/development of professional competency, understood as identification and analysis of practical and operational problems linked to integration in the class of students with SLD, with review, as a pro-active and relaunching function, in relation to conceptual and theoretical frameworks offered by the subject-related knowledge areas taught during lectures (regarding the pedagogic and didactic, psychological, medical and legal areas). For the purpose of promoting interconnectedness with the teaching of subjects, the traineeship activities have been developed in three stages, I, II and III, respectively, each divided into four topical areas with subject-related teaching, according to a scheme alternating the workshop traineeship at the academic location and activities in schools (Figure 1). As far as traineeship instructors are concerned, since we can only count on the limited involvement in mentoring tasks of staff in schools, due to organisational and management restrictions, instructors appointed by the University have been given this responsibility (according to an instructorcourse student ratio of 1:10, selected amongst teachers in service, on the basis of their educational and professional curriculum in the field of teaching students with SLD, who volunteered to undertake tutorrelated functions within the Master's programme. The action of the traineeship tutor is supported by a brief, initial training course, ongoing co-ordination meetings and via the setting up of a structured working guide, which provides the delivery schedule to be submitted to course students. The tutor action consists in preparing the traineeship activity in the school and in promoting integrated activation of the "practical" and formal knowledge areas acquired, as a function of analysis and discussion of observed cases (according to an approach attributable to "practice analysis" of French-speaking origin Altet, 2006; 2000) thanks to interprofessional discussion and exchange within the small group and one-on-one tutoring actions (according to and guided by the theoretical construct of «communities of practice»). The subject of observation-analysisproblematisation and development within the ambit of the traineeship and the didactic action of the teacher understood as «mediation action», refers to «what the teacher does in relation to what the student does for learning the cultural subjects» (Damiano, 2013, p.133). In other words, this means that the building block forming the foundation of the teacher's professional practice is «[...] conducting studies, establishing and changing content and pattern and making knowledge areas and methods available which, [one] thinks students are not able to acquire on their own or from the environment, based on the assumption that only if students apply themselves they may generate learning from within themselves» (Damiano 2013, p.134). In the first module, work delivery shared in the traineeship workshop (I.1), to be carried out during activities at school (I.2), provides for observation and reconstruction of a didactic action (lesson or cycle of lessons characterised by didactic and training consistency), according to: a. a structured schedule (a survey of what the teacher is asked to do from the standpoint of learning actions asked of students with SLD and the class; b. survey of students' responses; c. recording of any personal comments of the observer; d. recording of items regarding satisfactory/critical points from the standpoint of the class teacher surveyed via a brief feedback interview). Followed by, also thanks to group discussion mediated by the traineeship tutor, analysis of the observed actions, strengths and critical points, commencing from professional experience and theoretical elements offered in the subject-relating teaching of the Master's programme (1.3-4), to be formalised in a project work assignment, to be developed over the entire traineeship study path and the subject of final assessment at the end of the Master's degree). In the second module, in relation to the observed situation, the course student is asked to identify situations-problems of a professional nature (Pastré, 2007; Perrenoud, 1999b) arising from teaching in cases of students with SLD (II.1), prior to having shared the operational definition of the concept (situations presenting obstacles, challenges and problematic cases which raise issues - also of an ethical nature – reflection – also at metacognitive level – in relation to the planning and management of didactic sequences, learning assessment, management of the relationship with students and relations with colleagues and families. For example: how to motivate children who, due to their difficulties, prove to be problematic in involving in didactic activities? How to build positive synergies with families and colleagues? How to offer children with SLD activities which enhance their *learning potential?...*). Active involvement in class with debriefing interview with the teacher (Vermesch, 2011) (II.2) and subsequent description and analysis also in relation to conceptual and theoretical elements during the Master's degree lessons (II.3-4). Work delivery within the third module (III.1) provides for – given the situation-problem previously identified and also in the light of learning acquired of a conceptual and theoretical nature regarding teaching in mixed classes with students with SLD - the definition, whenever possible, via discussion and exchange with class teachers - regarding possible objectives for improvement, identifying cases for innovative action regarding methods for monitoring impact (III.2-3-4).

		Module I			
Study plan activities	Academic Credits/CFUs	Didactic activities			
Subject-related	16	Lectures/workshops (large group).			
teaching		Study and personal re-elaboration activities.			
Traineeship	4	I.1. Traineeship workshop (small group): analysis and sharing of individual delivery (I.2).			
		I.2. In-school activities: observation and guided reconstruction of school and didactic integration practices for students with Learning Disorders.			
		I.3. Traineeship workshop (small group); reporting of individual work and experience analysis.			
		I.4 Personal re-elaboration and formalisation: start of individual project work.			
		Module II			
Study plan activities	Academic Credits/CFU	Didactic activities			
Subject-related	15	Lectures/workshops (large group).			
teaching		Study activities and personal re-elaboration.			
Traineeship	5	II.1 Traineeship workshop (small group): analysis and sharing of individual delivery (II.2).			
		II.2. In-school activities: identification of situations-problem of a professional nature arising from teaching in classes with students with Learning Disorders.			
		II.3. Traineeship workshop (small group): reporting of individual work and experience analysis.			
		II.4. Personal re-elaboration and formalisation: development of project work.			

Figure 1. Division of traineeship activities of the Master's Degree in Didactics and Educational Psychology of Specific Learning Disorders of the University of Turin (A/Y 2011-12; 2012-13).

		Module III
Subject-related	10	Lectures/workshops.
teaching		Study activities and personal re-elaboration.
Traineeship	5	III.1 Traineeship workshop (small group): analysis and sharing of individual delivery (III.2).
		III.2. Activities in the school where in service: in relation to an identified situation- problem, subject cases of didactic action strategies that are consistent and assessable.
		III.3. Traineeship workshop (small group): reporting of individual work and experience analysis.
		III.4. Personal re-elaboration and formalisation: end of project work.
Final assessment	5	Discussion of project work.

# 4. The research

#### 4.1 Structure and methodology

The research originates from the need to obtain elements providing empirical confirmation in relation to the theoretical premise, according to which a didactic professional program based on the rationale "immersion-decontextualization" and focussing on promoting problematisation processes linked to the action of teaching (oriented towards promoting skills), based on the synergic activation of areas of knowledge of a scientific and discipline-oriented and teaching area-related nature, which have their roots in practice and experience – linked to the practice of working as a teacher – may represent a path that is feasible and potentially effective in the professional training of teachers in an academic environment, with specific reference to teachers working in classes which include students with SLD. The research also has the aim of gathering – from an exploratory standpoint and from the perspective of teachers, items of knowledge which are useful for identifying particularly critical areas in managing teaching practices in mixed classes, contexts which need to be taken into consideration when planning teacher training courses and which are the focus of in-depth study as part of the research in the pedagogic and didactic field. The study refers to the system which was tested during the second edition of the Master's program in A/Y 2012-2013 (pre-tested and fine-tuned over the first year of the course in A/Y 2011-12: sample of 71 master's program students). The research sample consisted of 52 teachers in service in Piedmont schools (6 preschool teachers, 32 primary school teachers and 14 middle school teachers), enrolled in the professional Master's program. Survey of the impact of professional placement was conducted by means of project work, required from Master's students, as documentation of their observation commitment in the field, their personal analysis processes of the professional practices surveyed, with individual elaboration of innovative cases of didactic action (Fig.1.: I.4; II.4; III.4). The observation context was represented by schools within the Piedmont region with agreements in place with the University of Turin, as venues for professional placement (in pre-schools, primary, secondary middle and high schools). For the purpose of extending the experience of professional knowledge areas, in relation to problems associated with managing mixed classes including school children and students with SLDs, the Master's students were able to choose their placement also at school levels which were not their habitual teaching level. The training device was thus "tested" with a random sample of individuals-graduating students, in any case, held to be significant for the purpose of a first validation, as was also the choice of the observation environments which, however, appeared, from an exploratory standpoint and from the perspective of building areas of knowledge in the pedagogic-didactic field of practice-based origin, to serve as a source providing input regarding the conditions and restrictions – starting from the professional training needs of teachers in service – for the dissemination of inclusive and personalised didactics, at least from the standpoint of the teachers-observers involved and with reference to the Italian domestic context. The unit of analysis of the textual material obtained was represented by identifying situations-problems – SP – of a typical and recurring professional nature arising from teaching in classes with the inclusion of students with SLD, from the standpoint of Master's students or set of teaching actions implemented habitually by teachers, with the aim of creating conditions favouring learning in their students (according to what was reported by professional placement students during the observation sessions in which they took part and validated by means of feedback interviews conducted with class teachers), which could be improved according to the reasoned and critically-based analysis of the Master's course students (Fig I: II.1-4). For the purpose of rendering the construct operational, the survey took the SPs described by course students into account in terms of "action flows" observed in context and identified/explained by the players, analysed with specific reference to theoretical and conceptual elements progressively consolidated/learned during the Master's program, recalled as interpretative frameworks potentially congruent for analysing the reconstructed phenomenologies (also in relation to identifying, in the third project work stage of the professional program, possible cases for taking action with the aim of introducing improvements). All written work produced regarding the second session of project work was subject, by the author, to analysis of the subject matter, adopting a post-encoding process and subsequent grouping into categories (with the support of N-Vivo 10 software), with frequency calculation (Trinchero, 2007; Miles, Huberman, Saldaña, 2014).

#### 4.2. Results

A first finding stemming from the analysis conducted concerns the nature of problematisation processes regarding professional practices, to which the learning system gave rise. In relation to the training objectives pursued by the professional traineeship model adopted, positive impact was found, with a high rate of SP identification "in the strict sense", attributable to professional practices precisely described (in terms of action flows variously reasoned/justified by players) and analysed and the conceptual and theoretical framework explained which was personally adopted by the professional course students as the reference for interpretation (also in relation to identifying cases for improvement/innovation) (Table1. 0.1). Amongst

the problematisation processes which may be considered external compared to the needs for training directed towards enhancing professional competence, in line with the theoretical assumptions adopted, one may identify, each time, focal points regarding problems at school of students with SLD (Table1. 0.2), problems arising from the marked heterogeneity of classes (Table 1. 0.3) and from inadequate preparation from the standpoint of teachers' methodology (Table1. 0.4).

0.	Analysis of professional practices and problematisation processes								
		-	Pre- school	Primary. school	Middle. school	High. school	Total	Total	
			f.	f.	f.	f.	f.	f.%	
0.1	Problems focussing on professional action in context (SP)		15	37	38	37	127	93	
).2	Problems focussing on the student				1	1	2	1	
).3	Problems focussing on context conditions			2	2	1	5	4	
).4			1	1	1		3	2	
		Total	16	40	42	39	137	100	

The analysis of surveyed SPs highlighted three areas identified as critical by teachers in managing teaching in classes with students with SLD: defining and managing learning strategies (Table1:1.1), classroom management (Table 1: 1.2.); problems associated with identifying and taking charge of cases of children with SLD.

Table 2

1.	Problematisation focussing on professional action in context (SP): environments									
		Pre- school	Primary. school	Middle. school	High. school	Total	Total			
		f.	f.	f.	f.	f.	f.%			
1.1	Managing didactic progression and mediation	4	15	23	23	65	51			
1.2	Classroom management	5	14	13	10	42	33			
1.3	Diagnostic practices and taking charge of students with SLD	6	8	2	4	20	16			
	Total	15	37	38	37	127	100			

Within the context of SPs attributable to managing didactic progression (Rey, 1999) and mediation, a stage indicated as highly problematic, albeit with different emphases, is represented by the continuation of teaching practices which are largely transmissive and abstract, based on the dominant use of symbolic mediators (Damiano, 2013); a point reported concerns the limited appreciation of the potential of multi-modal and multi-media communication using teaching technologies (Calvani, 2011; 2001) (Table 3: 1.1.1.; 1.1.2.). Of note is the finding that there is scarce and contextualised awareness of the ways for using compensatory tools and the exemptive measures provided under legislation supporting learning by students

with SLD<sup>4</sup> (Table 3: 1.1.3.) and methods for managing assessment practices, at times scarcely perceived at a docimological level, with limited appreciation of the learning support potential and for the teaching action (on-going assessment with educational function; assessment of cognitive and metacognitive processes; self-assessment; expressing judgement in pro-active terms) (Tab.3: 1.1.4) (Maccario, 2012) . The subject of foreign language teaching reveals its own critical areas, (especially in secondary school), associated with the offering of learning activities heavily based on decoding the written language (Table 3: 1.1.5). At times, the source of the problems regarding managing teaching in class can be identified in the excessively standardised/formalised planning practices adopted by schools which are ill-adapted to the actual, contextual conditions of classes and individual students or in the lack of ability to plan in response to the needs of students with SLD (Table 3: 1.1.6)<sup>5</sup>.

Table 3							
1.1	Management of didactic progression and mediation						
		Pre- school	Primary. school	Middle. school	High. school	Total	Total
		f.	f.	f.	f.	f.	f.%
1.1.1	Prevalence of classroom-taught lessons (deductive-abstract evolution, dominance of oral mediation and uniformity of requests to students from the standpoint of performance).	1	6	6	9	22	34
1.1.2.	Limited use of the communication potential of technologies.	1	1	4	4	10	15
1.1.3.	Formal/scarcely personalised use of compensatory tools and exemptive measures.		3	5	5	13	20
1.1.4	Limited explanation of assessment and judgement criteria; focus on results from a summative standpoint.		4	5	4	13	20
1.1.5.	Scarcely personalised teaching of foreign languages.			2	1	3	5
1.1.6.	Formalised/lack of planning practices.	2	1	1		4	6
	Total	4	15	23	23	65	100

In the area of classroom management, research identifies that maintaining class discipline is a problem and, likewise, suitable conditions for promoting the involvement of students who have scholastic vulnerabilities (Table 4: 1.2.1). Noteworthy and a recurring factor is the management of didactic communication following a method which effectively selects the more prepared students, marginalising those in difficulty (following a phenomenology already noted in literature–Perrenoud, 1997; Kahan, 2010) (Table 4: 1.2.2) and scarce

<sup>&</sup>lt;sup>4</sup> Compensatory tools are teaching and technological tools that replace or facilitate the performance required in the deficient learning ability (e.g. synthetic speech output, recording, word processing programmes with spell-checker tool, calculators, tables, formulas, maps, etc.). Exemptive measures are actions which allow the school child or student to carry out a number of tasks which would otherwise be particularly difficult due to the disorder and which do not enhance learning.

<sup>&</sup>lt;sup>5</sup> For school children with SLD, it is mandatory to prepare a Personalised Education Document (PED); the school may prepare an education plan document of this kind for all school children with Special Education Needs (SEN), whenever it believes it is required.

attention to building motivating relations with students (inappropriate use of praise; failure to share prospects moving in a pro-active direction on encountering repeated scholastic difficulties– Charles, 2002 ) and promoting in students respect for diversity and co-operation (correct rendering explicit the reasons underpinning use in class of compensatory and exemptive tools; use of methodologies based on cooperative learning and encouraging reciprocal support) (Table 4: 1.2.3). It can be seen, in a number of cases, that organisational conditions supporting learning are unsuitable for encouraging the involvement of students with SLD (uniform work groups in relation to student difficulties; arrangement of desks conditioning the possibility for exchange and reciprocal support amongst students; limited development of wall devices aiding decoding and memorisation; individual actions undertaken by the teacher which are often substituting or excessively simplifying and scarcely focussed on promoting learning strategies and personal study (Table 4: 1.2.4) (Tomlinson, 2006; Vio, & Toso, 2007; Cornoldi, 2007). With regard to taking charge of cases of students with SLD, one notes that, at times, there is limited investment in communication/co-operation with families, for the purpose of exchanging information and strategies moving towards building educational alliances (Table 5: 1.3.1) (Vio, & Toso, 2007; Epstein, 2009); uncertain/late identification of cases of students which may require further diagnosis; difficulty in developing personalised didactic plans which interpret the diagnostic findings of social and healthcare services.

1.2	Classroom management						
		Pre- school	Primary. school	Middle. school	High. school	Total	Total
		f.	f.	f.	f.	f.	f.%
1.2.1	Difficult management of class discipline/involvement	2	4	1	3	10	24
1.2.2	Selective dialogue and limited reciprocal communication		3	5	1	9	21
1.2.3	Limited attention to relations with and amongst students as a function of learning success	1	3	3	4	11	26
1.2.4	Organisational/management conditions and non-differentiated learning support actions	2	4	4	2	12	29
	Total	5	14	13	10	42	100

1.2	

Table 5

1.3	Diagnostic practices and taking charge of students with SLD						
		Pre- school	Primary. school	Middle. school	High. school	Total	Total
		f.	f.	f.	f.	f.	f.%
1.3.1	Limited communication strategies and educational alliances with families	2	3	2	2	9	45
1.3.2	Late/uncertain identification of problems at school attributable to SLD	4	3			7	35
1.3.2.	Interpretation/application difficulties regarding SLD diagnoses issued by social and healthcare services.		2		2	4	20
	Total	6	8	2	4	20	100

# 5. Conclusions

The experience conducted, although limited, confirms the possibility of offering university courses focussed on professional placement of teachers enhancing their professionalization, based on the dialogue between practical/experience-based areas of knowledge and alternation of didactic occasions/settings, within a framework of training synergies between university and school that provide for suitable assumption of responsibility and training of teachers for taking on mentoring functions (possibly also in context). The study also appears to indicate that the possibilities for creating inclusive and personalised teaching to the advantage of students with SLD – but not only limited to these – are particularly linked to a full review of teaching methods and development/fine-tuning of the competencies required of teachers for "creating a class" (Rey, 1999) as a community for student learning and growth, certainly issues which need to be studied further and which call on educational research to increase the knowledge base concerning "de facto" education practices as the assumption for identifying innovative strategies for action.

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